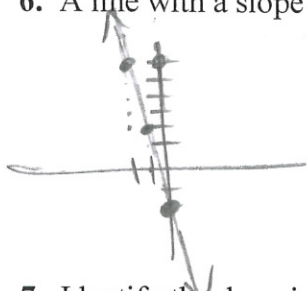
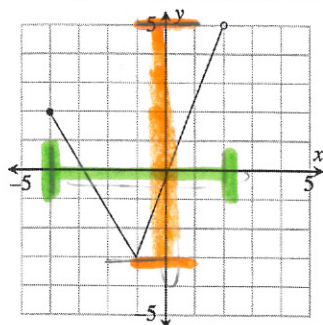


6. A line with a slope of -4 passes through the point $(-2, 6)$. What is the equation of the line?



$$y = -4x - 2$$

7. Identify the domain and range of this function.



Domain:

$$-5 \leq x < 2$$

Range:

$$-3 \leq y < 5$$

PART 2: Complete each problem below. SHOW YOUR WORK (2 pts. per part).

8. Simplify each expression. Your final answer should not contain any negative exponents.

A. $(4xy^3)(6x^2y)$

$$24x^3y^4$$

B. $\frac{15x^4}{6x^7}$

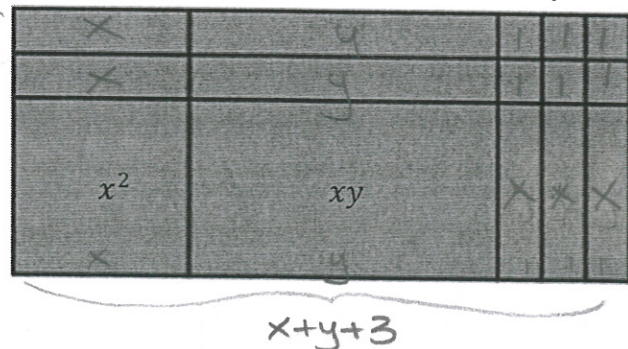
$$\frac{5}{2x^3}$$

C. $(3x^2yz^0)^4$

$$(3x^2yz^0)(3x^2yz^0)(3x^2yz^0)(3x^2yz^0)$$

$$81x^8y^4$$

9. Write the area of the rectangle below as a product and as a sum.



Area as a product:

$$(x+2)(x+y+3)$$

Area as a sum:

$$x^2 + xy + 5x + 2y + 6$$

10. Consider the expression $(-\frac{2}{3}) \cdot (-\frac{2}{3}) \cdot (-\frac{2}{3}) \cdot (-\frac{2}{3})$. What is another way to write this?

A. $-\frac{2^4}{3}$

B. $(-\frac{2}{3})^4$

C. $-(\frac{2}{3})^4$

D. $(\frac{2}{3})^{-4}$